

ENDOLUMINAL PROSTHESES AND THERAPIES FOR HIGHLY VARIABLE BODY LUMENS

ABSTRACT OF THE DISCLOSURE

50 B'7
The present invention provides a branching
endoluminal prosthesis for use in branching body lumen systems
which includes a trunk lumen and first and second branch
lumens. The prostheses comprises a radially expandable
tubular trunk portion having a prosthetic trunk lumen, and
10 radially expandable tubular first and second branch portions
with first and second prosthetic branch lumens, respectively.
A radially expandable tubular Y-connector portion provides
fluid communication between the prosthetic trunk lumen and the
first and second prosthetic branch lumens. Although it is
15 often considered desirable to maximize the column strength of
endoluminal prostheses, and although the trunk portion will
generally have a larger cross-section than much of the
remainder of a branching endoluminal prostheses, the expanded
trunk portion is more axially flexible than the expanded
20 Y-connector portion, as insufficient flexibility along the
trunk portion may result in leakage between the prosthesis and
the trunk lumen of the body lumen system. In contrast, the
Y-connector portion benefits from a less axially flexible
structure to avoid distortion of the flow balance between the
25 luminal branches.

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